USGS
science for a changing world

GAP Helps Map Out a Brighter Future For Us All

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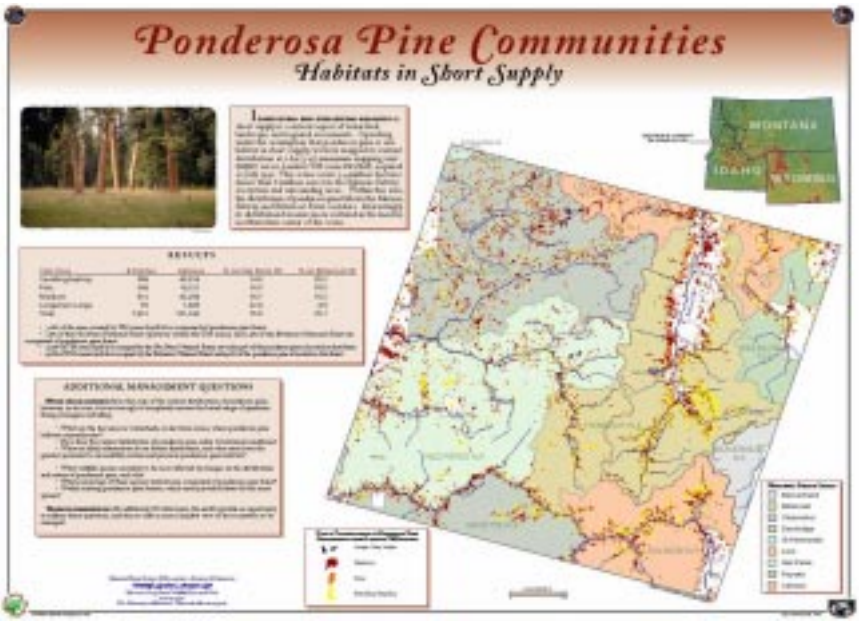
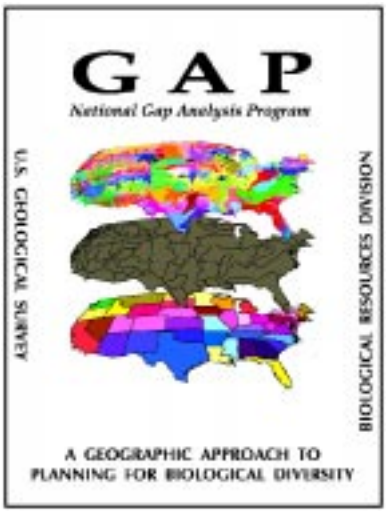


GAP identifies species and habitat types that may be at risk.

THE ISSUE

Over the past eight years, rapid progress has been made in developing computer maps of vegetation communities like Oak-Hickory Forests and Tallgrass Prairie and for each of about 300 to 700 native species of amphibians, birds, mammals, and reptiles. Today, such maps either have been made or are now being completed in each of the 48 contiguous states.

Over 500 federal, state, and local agencies, universities, and private organizations are participating in this work. Their goal is to learn more about which species or which habitat types could potentially become diminished or threatened with extinction. Interest stems from the rapid growth in residential, commercial, and industrial areas, as well as intensive uses of farm, forest, and recreation areas in recent decades. Because continued growth is expected, businesses and governments want this information to help them avoid conservation "surprises" or crises in the future, such as the famous spotted owl crisis in the Pacific Northwest. USGS is playing an important role in making these statewide and regionwide maps available for the first time. What's more, USGS is on the cutting edge of developing new science and technologies in order to achieve this type of information.



The Gap Analysis Program maps biodiversity in relation to land management status across the United States.

Mapping projects are carried out state-by-state. They are coordinated by the USGS Gap Analysis Program (GAP) and cost-shared roughly dollar-for-dollar in most states. Nine states have completed their projects and 25 are expected to complete their projects in the next 18 months.

States are now looking for the best way to house the massive amounts of natural resource information being developed and how to distribute it to the public after the projects are completed. In a few states, these questions have been solved by state-based support; but many states are still searching for answers to these difficult questions. Without decisive and focused activity now, these challenges may be more difficult -- *and* expensive -- to resolve later.

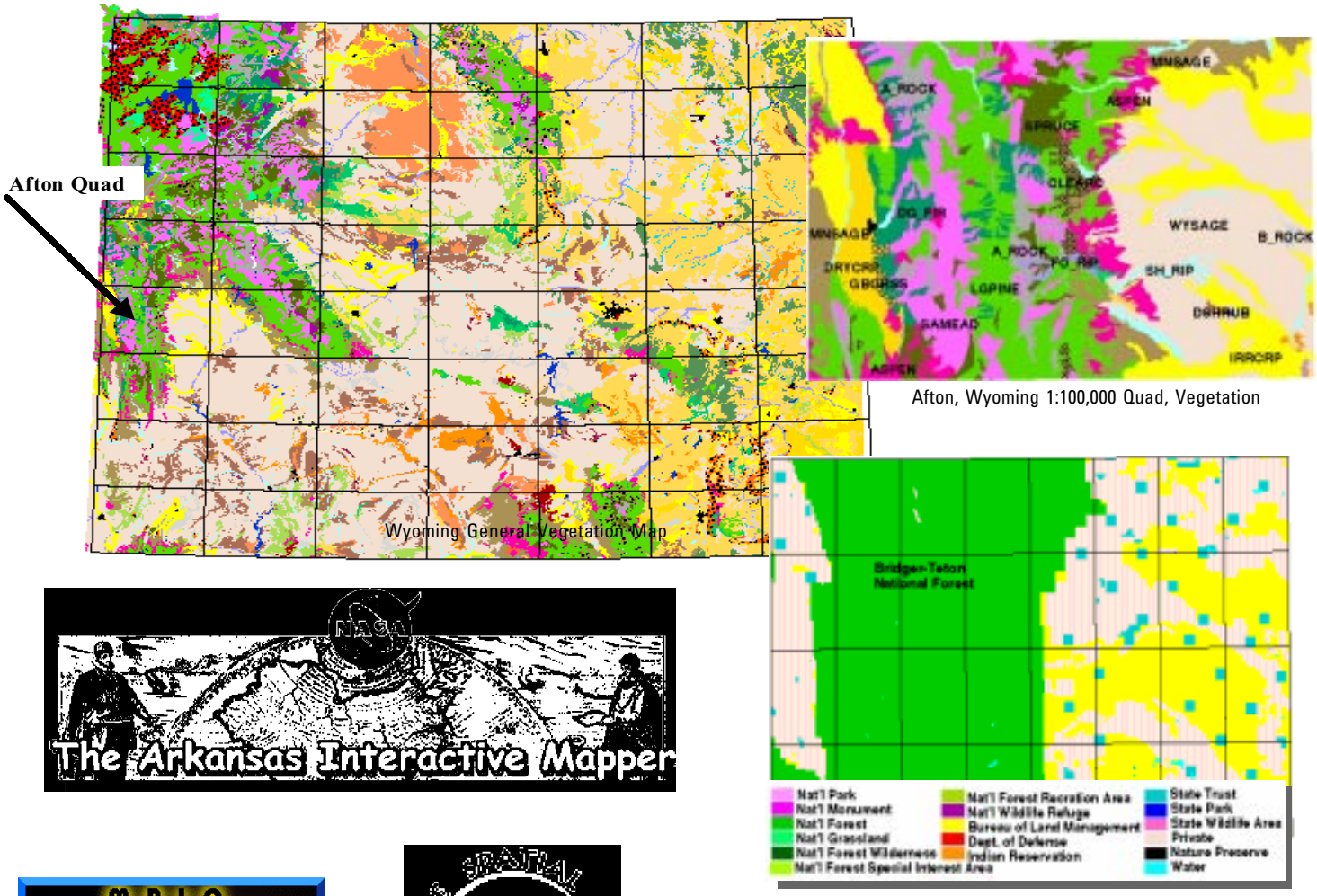
ANSWERING THE NEED

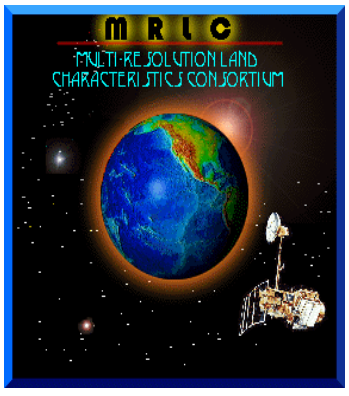
The federal response to begin solving this issue is in two FY 2000 budget initiatives. The first -- National Spatial Data Infrastructure-Community/Federal Information Partnerships (C/FIP) -- addresses the need to work with local, state, and tribal organizations as well as schools and the private sector in building the nation's information network. In so doing, many more people and communities would be able to use and create advanced information in a geographically referenced format. This would help state governments deliver geographic information, including GAP data, as well as help

people use the information in making everyday decisions about land use, from county planning to managing state parks. Under the C/FIP initiative, the USGS is requesting $3 million to fund biological information activities. Some of these funds would be used by state governments to house and deliver GAP data as well as to help people use the information.

Another FY2000 budget initiative falls under the National Biological Information Infrastructure (NBII). This initiative will focus on developing data nodes for a next-generation NBII. These nodes, many of them state-based, will convert much of the biological information that exists on paper to computer formats. They will develop advanced abilities to handle and synthesize vast amounts of biological data from many different sources, tailoring the output to the specific needs of, for instance, utility companies, forest managers, or schools. This thrust in advanced development would help clients use the large and complex GAP information more effectively. Under the NBII initiative, the USGS is requesting $1 million.

Here are a few examples of information available through GAP today





For More Information

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